Rotary
Conakry - Ratoma
CRÉONS DE L'ESPOIR
dans le MONDE

HITS
Harley-Davidson

HITS
Harley-Davidson

# Navier-Stokes Equations

## Continuity Equation

$$\nabla \cdot \vec{V} = 0$$

## Momentum Equations

$$\rho \frac{D\vec{V}}{Dt} = -\nabla p + \rho \vec{g} + \mu \nabla^2 \vec{V}$$

Total derivative

=

$$\rho[\frac{\partial V}{\partial t} + (V.\nabla)V]$$

Change of velocity with time

Convective term

Pressure gradient

Fluid flows in the direction of largest change in pressure.

Body force term

External forces, that act on the fluid (gravitational force or electromegnetic).

Diffusion term

For a Newtonian fluid, viscosity operates as a diffusion of momentum.

Ambassador
NEXT EINSTEIN FORUM
Africa
SCIENCE WEEK

istrict Assem
Co nce
Internati
e Centre Aber

COMITÉ
D'ORGANISATION

th District Assembly
&
Freetov
deen
lcome

th District Assemb
Rotary

COMITÉ
D'ORGANISATION

ANNING
Démarrage
1/05/2022
Fin des travaux
1/11/2022
TRAVAUX
DE CONAKRY
PH
Conakry - BP 2016